

ETC Tiger Pipeline, LLC  
ETC Tiger Pipeline, LLC - Chatham Compressor Station  
Chatham, Jackson Parish, Louisiana  
Agency Interest Number: 166495

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

ETC Tiger Pipeline, LLC  
ETC Tiger Pipeline, LLC - Chatham Compressor Station  
Chatham, Jackson Parish, Louisiana  
Agency Interest Number: 166495  
Activity Number: PER20090001  
Proposed Permit Number: 1300-00478-V0

**I. APPLICANT**

**Company:**  
ETC Tiger Pipeline, LLC  
800 E Sonterra Blvd, Suite 400  
San Antonio, Texas 78258-3941

**Facility:**  
ETC Tiger Pipeline, LLC - Chatham Compressor Station  
Chatham, Jackson Parish, Louisiana  
Approximate NAD83 coordinates: 32°19'21" latitude and 92°27'47" longitude.

**II. FACILITY AND CURRENT PERMIT STATUS**

The proposed Chatham Compressor Station is one component of the proposed Tiger Pipeline Project, an interstate pipeline transportation system designed to transport natural gas from the growing Haynesville shale production region in east Texas and northwest Louisiana to markets in the Midwest, Northeast and Southeast through seven interconnects with interstate natural gas pipeline system, and one bi-directional interconnect with an intrastate natural gas pipeline system. The Tiger Pipeline Project will be designed to transport up to 2 billion cubic feet of natural gas per day.

ETC Tiger Pipeline, LLC - Chatham Compressor Station is a designated Part 70 source.



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### **III. PROPOSED PROJECT/PERMIT INFORMATION**

#### **Application**

A permit application was submitted on August 3, 2009 requesting a Part 70 operating permit for the ETC Tiger Pipeline, LLC - Chatham Compressor Station. Additional information dated September 2, 2009 was also submitted.

#### **Project**

The proposed Chatham Compressor Station will be equipped with four natural gas-fired compressor engines (COMP-1 to COMP-4), piping, fugitive components (FUG), gas coolers, ten liquid storage tanks (TANK-1 to TANK-10), truck loading (LOAD), and an emergency generator (GEN-1) that will provide backup power for lights and computers. Ten tanks will be used for storage of pipeline fluids, lube oil, skid wash water, and engine coolant. Entrained liquids (water) separated from the inlet gas in high pressure separators will be routed to the 300-barrel tanks (TANK-2 to TANK-5). The pigged liquids and separated/entrained liquids will periodically be loaded into tank trucks for offsite transfer and disposal or sale as appropriate. Lube oil for the engines will be stored in one 100-barrel tank (TANK-6) and used lube oil to shipped offsite will be stored in one 100-barrel tank (TANK-10). The engine skid will be routinely washed down with water for housekeeping. The runoff water with traces of oil will be stored in a 300-barrel tank (TANK-7). The remaining two tanks (TANK-8 and TANK-9) will be used for new and used engine cooling water, a 50/50 mixture of ethylene glycol and water.

Natural gas will be the only fuel fired in any of the combustion sources. Combustion exhaust gases from each engine are routed through a silencer and then vented to the atmosphere. After routing to the compressor engines, the natural gas is sent through a discharged header and continues to the transmission pipeline.

#### **Proposed Permit**

Permit 1300-00478-V0 will be the initial Part 70 operating permit for the ETC Tiger Pipeline, LLC - Chatham Compressor Station.



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**Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Emissions (tpy)</u>
PM <sub>10</sub>	8.69
SO <sub>2</sub>	8.21
NO <sub>x</sub>	142.98
CO	75.08
VOC	61.91

**IV REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

**Applicability and Exemptions of Selected Subject Items**

ID No.	Requirement	Note
COMP-1 to -4 Compressor Engines GEN-1 Emergency Engine	Emission Standards for Particulate Matter [LAC 33:III.1313]	DOES NOT APPLY. These engines do not produce steam, hot water, or other indirect heating of liquids, gases, or solids [LAC 33:III.1313.B].
	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1511.A] Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	EXEMPT. Units emit less than 250 tons of SO <sub>2</sub> per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO <sub>2</sub> standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.
	Standards of Performance for New Stationary Spark Ignition Internal Combustion Engines [40 CFR 60, Subpart JJJJ]	APPLY. These new, natural gas-fired engines with a maximum engine power great than 500 hp are subject to all applicable requirements of 40 CFR 60.Subpart JJJJ.



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TANK-1 to -6 Storage Tanks	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Storage tanks have a capacity of less than 75 cubic meters and store condensate prior to custody transfer.
	Control of Organic Compound Emissions, Storage of Volatile Organic Compounds [LAC 33:III.2103]	DOES NOT APPLY. These tanks store crude oil and condensate, and are less than 420,000 gallons [LAC 33:III.2103.G.1].
LOAD Tank Truck Loading	Control of Emissions of Organic Compounds from VOC Loading [LAC 33:III.2107]	DOES NOT APPLY. The facility does not have a throughput of more than 20,000 gallons per day [LAC 33:III.2107.A.1.a].
FUG Fugitive Emissions	Control of Emissions of Organic Compounds from Pumps and Compressors [LAC 33:III.2111]	APPLY. The facility has compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater.

**Prevention of Significant Deterioration/Nonattainment Review**

Emissions of criteria pollutants will be below the PSD major source threshold of 250 tons/year. PSD review is not required.

**Streamlined Equipment Leak Monitoring Program**

The permit does not include any Streamlined Equipment Leak Monitoring Program.

**MACT Requirements**

Emissions of both Louisiana Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAPs) will be below the major source threshold of 10/25 tons/year. The facility is classified as a minor source of Toxic Air Pollutants (TAPs) pursuant to LAC 33:III.Chapter 51 and an area source of HAP. The proposed compressors and generator engines will be subject to 40 CFR 63 (NESHAP) Subpart ZZZZ. These engine will comply with this NESHAP standard by complying with 40 CFR 60 (NSPS) Subpart JJJJ as specified in 40 CFR 63.6590(c).



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### Air Quality Analysis

Screen dispersion model (ISCST3) indicates that maximum offsite concentration of criteria pollutant will be below the modeling significant levels. Refined model is not required.

Pollutant	Averaging Period	Calculated Maximum Ground Level Concentration ( $\mu\text{g}/\text{m}^3$ )	National Ambient Air Quality Standard ( $\mu\text{g}/\text{m}^3$ )
PM <sub>10</sub>	24 hour	0.94	150
	Annual	0.19	50
Sulfur Dioxide	3 hour	2.02	1300
	24 hour	0.91	365
	Annual	0.17	80
Nitrogen Dioxide	Annual	5.11	100
Carbon Monoxide	1 hour	93.88	40,000
	8 hour	65.86	10,000

### General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

### Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

## **V. PERMIT SHIELD**

This permit does not contain any permit shield.

## **VI. PERIODIC MONITORING**

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permits.

## **VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.



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Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide ( $H_2S$ ) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides ( $NO_x$ ) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane ( $CH_4$ ), Ethane ( $C_2H_6$ ), Carbon Disulfide ( $CS_2$ )

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

$PM_{10}$  – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.